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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	215.396	177.437	295.177	-	295.177	318.674	291.722	202.341	277.895	Continuing	Continuing
330: Abrams Tank Improve Prog	-	86.764	101.265	112.544	-	112.544	159.205	138.377	63.262	94.795	Continuing	Continuing
371: Bradley Improve Prog	-	75.769	76.172	92.427	-	92.427	98.997	100.118	115.444	158.070	Continuing	Continuing
DS5: Armored Multi Purpose Vehicle	-	52.863	-	-	-	-	-	-	-	-	Continuing	Continuing
EE2: Stryker Improvement	-	-	-	90.206	-	90.206	60.472	53.227	23.635	25.030	-	252.570

The FY 2015 OCO Request will be submitted at a later date.

Note

The Stryker Program is submitted under a new Program Element for the FY 2015 President's Budget. The previous program element was 0603653A, project C03 and C51, Advanced Tank Armament System (ATAS.)

A. Mission Description and Budget Item Justification

The Army has approved engineering change proposals for the Abrams, Bradley and Stryker programs to restore lost platform capability and host inbound technologies.

This Program Element (PE) corrects vehicle deficiencies identified in Army operations; continues technical system upgrades to include the integration of applicable technologies on ground systems; addresses needed evolutionary enhancements to tracked combat vehicles; and develops technology improvements which have application to or insertion opportunities across multiple Ground Combat Systems vehicles. This PE provides combat effectiveness and Operating and Support (O&S) cost reduction enhancements for the Abrams tanks, Bradley Fighting Vehicles and Stryker Family of Vehicles (FOVs) through a series of product improvements.

The strategy for Abrams and Bradley will focus on incrementally delivering capability to the warfighter to meet both near-term limitations as well as mitigating gaps and maintaining combat overmatch in the future. This effort was approved by the Army Acquisition Executive in 3Q FY 2011.

The Abrams M1A2 SEP V2 and M2/M3A3 Bradley Fighting Vehicles are at or exceed Space, Weight, and Power-Cooling (SWaP-C) limitations. In order to host and restore lost platform capability, the Abrams Tank and Bradley Fighting Vehicle programs will execute a series of Engineering Change Proposals (ECPs) to support the current embedded systems and to facilitate integration of technologies currently in development under other existing Programs of Record. The ECPs are not intended to exceed the operational capability outlined in current system requirements documents, but rather to ensure that the existing system performance is not further degraded and that Army mission equipment packages can be integrated on the Abrams and Bradley Platforms.

Stryker Improvement program (EE2), will enable the Stryker Family of Vehicles (FOV) to host the future network without further degrading vehicle performance. The upgrade will increase available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with an in-vehicle network, this will

UNCLASSIFIED

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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>
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ensure the FOV can host the future network while retaining its protection and mobility. Funding in FY 15-19 supports continued development engineering efforts on the Stryker Engineering Change Proposal (ECP).

B. Program Change Summary (\$ in Millions)	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015 Base</u>	<u>FY 2015 OCO</u>	<u>FY 2015 Total</u>
Previous President's Budget	253.959	177.532	219.937	-	219.937
Current President's Budget	215.396	177.437	295.177	-	295.177
Total Adjustments	-38.563	-0.095	75.240	-	75.240
• Congressional General Reductions	-16.400	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-6.732	-			
• Other Adjustments 1	-15.431	-0.095	75.240	-	75.240

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs				Project (Number/Name) 330 / Abrams Tank Improve Prog			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
330: Abrams Tank Improve Prog	-	86.764	101.265	112.544	-	112.544	159.205	138.377	63.262	94.795	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The Army has approved engineering change proposals for the Abrams program to restore lost platform capability and host inbound technologies. The strategy for Abrams will focus on incrementally delivering capability to the warfighter to meet both near-term limitations as well as mitigating gaps and maintaining combat overmatch in the future. This effort was approved by the Army Acquisition Executive in 3Q FY 2011.												
The Abrams M1A2 SEP V2 vehicle is at or exceeds Space, Weight, and Power-Cooling (SWaP-C) limitations. In order to host and restore lost platform capability, the Abrams Tank will execute a series of Engineering Change Proposals (ECPs) to support the current embedded systems and to facilitate integration of technologies currently in development under other existing Programs of Record. The ECPs are not intended to exceed the operational capability outlined in current system requirements documents, but rather to ensure that the existing system performance is not further degraded and that Army mission equipment packages can be integrated on the Abrams Platform. 3rd Generation Forward Looking Infrared (IFLIR) integration efforts will begin in FY16.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Abrams Engineering Change Proposal (ECP) 1									72.324	83.900	89.497	
									Articles: -	-	-	
Description: The M1A2 SEPv2 improvements implemented through the Abrams ECP 1 Program will restore lost power generation and distribution while incorporating inbound technologies currently under development under other existing Programs.												
FY 2013 Accomplishments:												
The largest portion of sub-system integration was executed in FY 2013 with the confirmation of the preliminary design at the Preliminary Design Review. This will quickly be followed by the Critical Design Review in 3Q FY 2014, finalizing the system baseline.												
FY 2014 Plans:												
The Critical Design Review will occur in 3QFY2014. This will finalize the system baseline and initiate technology integration of Joint Tactical Radio System Handheld Manpack Small (JTRS-HMS) and Joint Battle Command-Platform (JBC-P) to enable network compatibility, Power Generation/Distribution (battery monitoring system, increased amperage alternator, slip ring), auxiliary power unit, ammunition data link, armor protection upgrade, Counter Remote Control Improvised Explosive Device												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs	Project (Number/Name) 330 / Abrams Tank Improve Prog		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
(RCIED) Electronics Warfare System (CREW) Duke V3, and Line replacement modules as well as the start of nine (9) prototype builds. FY 2015 Plans: FY15 will consist of completing prototype builds, component qualification testing, contractor vehicle testing, and initial prototype handoff for government testing.					
Title: Program Management Office (PMO) Support Articles: Description: Program Management Office Support includes Systems Engineering and Government and Contractor salaries, travel and other support costs required to effectively manage the program. FY 2013 Accomplishments: Systems Engineering and Program Management Office Support to effectively manage the program. FY 2014 Plans: Systems Engineering and Program Management Office Support to effectively manage the program. FY 2015 Plans: Systems Engineering and Program Management Office Support to effectively manage the program.			12.467 -	15.413 -	15.957 -
Title: Test & Evaluation Articles: Description: Test and Evaluation FY 2013 Accomplishments: Test & Evaluation efforts to support system level test events and planning and development of test documentation FY 2014 Plans: Test & Evaluation efforts to support system level test events and planning and development of test documentation FY 2015 Plans: Test & Evaluation efforts to support system level test events and planning and development of test documentation. We will be conducting Original Equipment Manufacturer (OEM) testing to include software, mobility, communications, and slope and grade testing. Firing functionality of the main gun and secondary weapon systems will occur at Aberdeen Proving Grounds, MD and Yuma Proving Grounds, AZ.			1.973 -	1.952 -	7.090 -
Accomplishments/Planned Programs Subtotals			86.764	101.265	112.544

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014	
Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs				Project (Number/Name) 330 / Abrams Tank Improve Prog			
C. Other Program Funding Summary (\$ in Millions)											
	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
Line Item											
• Abrams Upgrade	241.540	90.000	-	-	-	-	-	-	-	-	331.540
Program: Abrams Upgrade Program (GA0750) WTCV											
• M1 Abrams Tank Mod (GA0700): Abrams Vehicle Modification (GA0700) WTCV	128.920	178.100	237.023	-	237.023	461.248	684.958	626.855	787.643	11,300.000	14,404.747
Remarks											
D. Acquisition Strategy											
Abrams Engineering Change Proposal (ECP) 1: Research & Development Contract - Sole Source, Cost Plus Incentive Fee (CPIF); Production Contract - Sole Source, Firm Fixed Price											
E. Performance Metrics											
N/A											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army													Date: March 2014		
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>				Project (Number/Name) 330 / <i>Abrams Tank Improve Prog</i>					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Abrams Engineering Change Proposal (ECP) 1	SS/CPIF	General Dynamics Land Systems : Sterling Heights, MI	80.000	72.324	Jul 13	83.900	Mar 14	89.497	Mar 15	-		89.497	71.067	396.788	-
Subtotal			80.000	72.324		83.900		89.497		-		89.497	71.067	396.788	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Office (PMO)Support	MIPR	PMO Support Offices : Various	30.193	12.467	Dec 2012	15.413	Dec 2013	15.957	Dec 2014	-		15.957	Continuing	Continuing	Continuing
Subtotal			30.193	12.467		15.413		15.957		-		15.957	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Advance Technology Preparation and Testing	MIPR	Aberdeen Proving Ground; Yuma Proving Ground; White Sands Missile Range, : Various	9.200	1.973	Jan 2013	1.952	Jan 2014	7.090	Jan 2015	-		7.090	Continuing	Continuing	Continuing
Subtotal			9.200	1.973		1.952		7.090		-		7.090	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			119.393	86.764		101.265		112.544		-		112.544	-	-	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>			Project (Number/Name) 330 / <i>Abrams Tank Improve Prog</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Preliminary Design Review (PDR)																												
Critical Design Review (CDR)																												
Component Qualification Testing																												
Contractor Prototype Proveout																												
Pre Production Test																												
Production Contract Award																												
Live Fire Test & Evaluation (LFT&E)																												
Production Qualification Testing (PQT)																												
Logistics Demo																												
Follow-on Test and Evaluation (FOT&E)																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>	Project (Number/Name) 330 / <i>Abrams Tank Improve Prog</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Preliminary Design Review (PDR)	4	2013	4	2013
Critical Design Review (CDR)	3	2014	3	2014
Component Qualification Testing	4	2014	4	2015
Contractor Prototype Proveout	2	2015	1	2016
Pre Production Test	4	2015	1	2018
Production Contract Award	2	2016	2	2016
Live Fire Test & Evaluation (LFT&E)	1	2018	4	2018
Production Qualification Testing (PQT)	3	2018	2	2020
Logistics Demo	4	2018	3	2019
Follow-on Test and Evaluation (FOT&E)	3	2019	1	2021

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs				Project (Number/Name) 371 / Bradley Improve Prog			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
371: Bradley Improve Prog	-	75.769	76.172	92.427	-	92.427	98.997	100.118	115.444	158.070	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note Not Applicable for this item.												
A. Mission Description and Budget Item Justification The M2/M3A3 Bradley Fighting Vehicle is at or exceeds Space, Weight, and Power-Cooling (SWAP-C) limitations. To restore lost platform capability and to host other Army Existing Programs of Record, the Bradley Fighting Vehicle program shall execute a series of Engineering Change Proposals (ECPs). ECP 1 improves vehicle's track and suspension while ECP 2 improves the power train and electrical system to enable the A3 fleet to host inbound technologies from Army Program of Records, including Joint Tactical Radio System (JTRS) and Joint Battle Command – Platform (JBC-P). The ECPs are not intended to exceed the operational capability outlined in current system requirement documents, but rather to ensure that the existing system performance is not further degraded and that Army mission equipment packages can be integrated on the Bradley platform. ECP2 development effort will lead to a production start in FY17. A separate integration effort begins in FY14 for an underbelly armor kit for improved survivability against blast threats. Additionally, Improved FLIR (IFLIR) integration effort will begin in FY16 that will replace the current second generation FLIR for increased lethality through improved target acquisition capability.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Bradley Engineering Change Proposal (ECP) Program Articles: Description: The Bradley Fighting Vehicle System (BFVS) improvements implemented through the Engineering Change Proposal (ECP) Program will focus on restoring lost platform capability to support Army inbound technologies and to facilitate integration of technologies currently in development under other existing Programs of Record. FY 2013 Accomplishments: Bradley Modernization - The Bradley Fighting Vehicle System (BFVS) improvements implemented through the Engineering Change Proposal (ECP) Program will focus on restoring lost platform capability to support Army inbound technologies and to facilitate integration of technologies currently in development under other existing Programs of Record. Complete System Requirements Review (SRR) and Preliminary Design Review (PDR). FY 2014 Plans:									65.151	58.537	63.473	
									-	-	-	

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014			
Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs		Project (Number/Name) 371 / Bradley Improve Prog		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2013	FY 2014	FY 2015
Complete the Critical Design Review, continue qualification testing moving forward with vehicle integration and contractor testing.						
FY 2015 Plans: Build ECP 2 prototypes and begin contractor component & qualification testing, Combat Simulation Integration Lab (CSIL), Vehicle Test Integration Lab (VTIL) test efforts and vehicle level system integration testing. Begin Production Qualification Test (PQT) planning, new equipment training and obtaining equipment for government test.						
Title: Bradley Improvements				-	2.046	9.735
Articles:				-	-	-
Description: Initiate Underbelly Armor Technologies. The Bradley Family of Vehicles will integrate underbelly armor for improved survivability against blast threats and weight reduction efforts.						
FY 2014 Plans: Award major integration contracts for Underbelly improvements for increased lethality and survivability.						
FY 2015 Plans: Award major integration contracts for Underbelly improvements for increased lethality and survivability.						
Title: Program Management Office (PMO) Support				8.658	11.322	11.537
Articles:				-	-	-
Description: Program Management Office Support includes Systems Engineering, Government and Contractor salaries, travel and other support costs required to effectively manage the program.						
FY 2013 Accomplishments: Government System Engineering, Program Management Support Costs. These funds cover the costs of Government salaries, travel and the facilities required to effectively manage the program.						
FY 2014 Plans: Government System Engineering, Program Management Support Costs. These funds cover the costs of Government salaries, travel and the facilities required to effectively manage the program.						
FY 2015 Plans: Government System Engineering, Program Management Support Costs. These funds cover the costs of Government salaries, travel and the facilities required to effectively manage the program.						
Title: Test & Evaluation				1.960	4.267	7.682
Articles:				-	-	-

UNCLASSIFIED

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Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs				Project (Number/Name) 371 / Bradley Improve Prog				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Description: Test & Evaluation efforts support system sub-system test events and planning and development of test documentation.												
FY 2013 Accomplishments: Test & Evaluation efforts support system sub-system test events and planning and development of test documentation.												
FY 2014 Plans: Test & Evaluation efforts support system sub-system test events and planning and development of test documentation. Start Component Qualification testing.												
FY 2015 Plans: Test & Evaluation efforts support system sub-system test events and planning and development of test documentation. Continue component qualification testing. Begin Contractor Vehicle testing and Government evaluation of contractor testing. Begin contractor component & qualification testing, Combat Simulation Integration Lab (CSIL), Vehicle Test Integration Lab (VTIL) test efforts and vehicle level system integration testing. Begin Production Qualification Test (PQT) planning, new equipment training and obtaining equipment for government test.												
Accomplishments/Planned Programs Subtotals										75.769	76.172	92.427
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• GZ2400: Bradley Program (MOD)	266.730	158.000	107.506	-	107.506	359.551	512.212	737.912	793.122	1,120.238	4,055.271	
Remarks												
D. Acquisition Strategy												
Product Manager Bradley will execute an Engineering Change Proposal (ECP) reestablishing Space, Weight, Power and Cooling (SWAP-C) to facilitate integration of technologies being developed under existing Programs of Record (POR). The proposed ECP will restore lost capability, not to exceed operational envelopes outlined in current approved requirement documents. The ECP is scheduled to field in FY 2018 to address powerpack and electrical power upgrades, which will enable the vehicle to host Army directed inbound technologies with no further performance degradation to the vehicle. This ECP development will be executed on a sole source cost plus incentive fee contract to the current platform Original Equipment Manufacturer. Integration of the Improved Forward Looking Infrared (IFLIR) sights will be executed through a sole source cost plus contract with the Bradley Original Equipment Manufacturer beginning in FY16. The IFLIR system will be developed by Project Manager, Night Vision/Reconnaissance, Surveillance, and Target Acquisition (PM NV/RSTA) and be provided to Product Manager Bradley as a Horizontal Technology Integration effort.												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs	Project (Number/Name) 371 / Bradley Improve Prog
E. Performance Metrics N/A		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>						Project (Number/Name) 371 / <i>Bradley Improve Prog</i>			
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Bradley Modernization Program	SS/CPIF	PMO : Warren	79.009	-		-		-		-		-	-	79.009	-
Non Recurring Engineering	SS/CPFF	L3COM : Muskegon, MI	0.000	5.630	Aug 2013	8.000	Apr 2014	4.089	Apr 2015	-		4.089	Continuing	Continuing	Continuing
Non Recurring Engineering	SS/CPIF	BAE : Sterling Heights, MI	3.821	59.521	Jun 2013	50.537	Jun 2014	59.384	Jun 2015	-		59.384	Continuing	Continuing	Continuing
Bradley Improvement Integration	SS/CPIF	BAE : Sterling Heights, MI	0.000	-		2.046	Jun 2014	9.735	Jun 2015	-		9.735	Continuing	Continuing	Continuing
Subtotal			82.830	65.151		60.583		73.208		-		73.208	-	-	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMO/PEO Support	MIPR	PMO/PEO : Bradley ECP Program	6.561	3.988	Dec 2012	3.952	Dec 2013	4.026	Dec 2014	-		4.026	Continuing	Continuing	Continuing
Government Engineering Support	MIPR	Various : Bradley ECP Program	15.219	4.670	Dec 2012	7.370	Dec 2013	7.511	Dec 2014	-		7.511	Continuing	Continuing	Continuing
Subtotal			21.780	8.658		11.322		11.537		-		11.537	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Testing	MIPR	Various : Test Sites	0.800	1.960	Jun 2013	1.812	May 2014	2.685	May 2015	-		2.685	Continuing	Continuing	Continuing
Contractor Testing	SS/CPIF	BAE : Various	0.000	-		2.455	May 2014	4.997	May 2015	-		4.997	Continuing	Continuing	-
Subtotal			0.800	1.960		4.267		7.682		-		7.682	-	-	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army										Date: March 2014			
Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>				Project (Number/Name) 371 / <i>Bradley Improve Prog</i>					
	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	105.410	75.769		76.172		92.427		-		92.427	-	-	-
Remarks													

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 7		R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>			Project (Number/Name) 371 / <i>Bradley Improve Prog</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Bradley Engineering Change Proposal Program																												
System Requirements Review																												
Preliminary Design Review																												
Critical Design Review																												
Component Qualification Testing																												
Contractor Vehicle Testing																												
Production Qualification Test (PQT)																												
Production Contract Award																												
Follow-on Test and Evaluation (FOT&E)																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>	Project (Number/Name) 371 / <i>Bradley Improve Prog</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Bradley Engineering Change Proposal Program	1	2012	4	2018
System Requirements Review	2	2013	2	2013
Preliminary Design Review	4	2013	4	2013
Critical Design Review	3	2014	3	2014
Component Qualification Testing	3	2014	2	2015
Contractor Vehicle Testing	3	2015	3	2016
Production Qualification Test (PQT)	2	2016	2	2018
Production Contract Award	3	2017	3	2017
Follow-on Test and Evaluation (FOT&E)	1	2019	2	2019

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs				Project (Number/Name) DS5 / Armored Multi Purpose Vehicle			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
DS5: Armored Multi Purpose Vehicle	-	52.863	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note The new program element is 0605028A, Project EB5, Armored Multi Purpose Vehicle (AMPV). The previous program element was 0203735A, Project DS5, Combat Vehicle Improvement Program.												
A. Mission Description and Budget Item Justification The Armored Multi Purpose Vehicle Program is submitted under Program Element 0605028A, Project EB5 for the FY2015 Budget Estimate Submission.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Armored Multi-Purpose Vehicle Articles: Description: .Armored Multi-Purpose Vehicle (AMPV) Replaces the Army's Armored Personnel Carrier (M113) Family of Vehicles (FoV). The Armored Multi-Purpose Vehicle (AMPV) is a materiel solution to support the Armored Brigade Combat Team (ABCT) across the Spectrum of Conflict by replacing five mission roles currently performed by the M113 Family of Vehicles (FOV) and integrating the current M113 FOV Mission Equipment Package (MEP) to a Military Vehicle Derivative (MVD). FY 2013 Accomplishments: The Joint Requirements Oversight Council (JROC) validated the Capabilities Development Document (CDD) on 16 Mar 2013. The Defense Acquisition Executive (DAE) approved the AMPV Acquisition Concept on 12 Feb 2013 and authorized release of a draft Request for Proposal (RFP) to industry on 21 Mar 2013. Product Manager (PdM) AMPV also held an Industry Day on 22 - 24 of April 2013 to support a competitive acquisition approach. Following the industry day, PdM AMPV revised the performance specification and acquisition strategy based on industry feedback. PdM AMPV held a Defense Acquisition Board (DAB) on 13 Aug 2013 for final release of the RFP to industry. The DAE directed the Army to re-evaluate the EMD schedule, LRIP contract and RAM Growth Curve. Changes based on this direction resulted in the plan to release another draft RFP to industry on 26 Sep 2013.									52.863	-	-	
									-	-	-	
									Accomplishments/Planned Programs Subtotals			52.863

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>	Project (Number/Name) DS5 / <i>Armored Multi Purpose Vehicle</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army													Date: March 2014		
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>					Project (Number/Name) DS5 / <i>Armored Multi Purpose Vehicle</i>				

Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
AMPV Development	MIPR	Other Government Agencies : Various locations	8.263	35.869	Dec 2012	-		-		-		-	-	44.132	-
Subtotal			8.263	35.869		-		-		-		-	-	44.132	-

Remarks Armored Multi Purpose Vehicle Tech data and system level product development costs.															
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Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
AMPV Documentation	C/FFP	Camber : Michigan	1.000	1.016	Jan 2013	-		-		-		-	-	2.016	-
Program Management Office (PMO)	MIPR	PMO : Warren, MI	1.790	2.973	Dec 2012	-		-		-		-	-	4.763	-
Other Program Support	MIPR	OGAs : Various locations	2.788	13.005	Feb 2013	-		-		-		-	-	15.793	-
Subtotal			5.578	16.994		-		-		-		-	-	22.572	-

Remarks AMPV Support Costs															
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	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	13.841	52.863	-	-	-	-	-	66.704	-

Remarks									
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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0203735A / Combat Vehicle Improvement Programs				Project (Number/Name) EE2 / Stryker Improvement			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
EE2: Stryker Improvement	-	-	-	90.206	-	90.206	60.472	53.227	23.635	25.030	-	252.570
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker ECP program, which was originally funded by PE Number 0603653A/Priject C03 (FY13) and Project C51 (through FY14).												
A. Mission Description and Budget Item Justification												
Stryker Modernization will enable the Stryker FOV to host the future network without further degrading vehicle performane. The upgrade will increase available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with a digital backbone, this will ensure the FOV can cost the future network while retaining its protection and mobility. Funding in FY15-19 supports continued development engineering, prototype build and testing efforts on the Stryker Engineering Change Proposal (ECP). Funding for this effort was previously funded in Program Element 0603653A/Project C51 and Project C03 (FY13).												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: Stryker ECP Development (Engineering/Prototypes)									-	-	78.924	
Description: Funding is provided for the following effort												
FY 2015 Plans:												
Continuing development engineering for the Stryker ECP upgrades and continue procuring prototypes for the engine, alternator, suspension and in-vehicle network on the DVH variant.												
Title: Training Device Updates									-	-	3.588	
Description: Funding is provided for the following effort												
FY 2015 Plans:												
Continuing the development and design of training device upgrades to reflect the ECP upgrades to the vehicles.												
Title: Stryker ECP Testing									-	-	2.463	
Description: Funding is provided for the following effort												
FY 2015 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 7				R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>				Project (Number/Name) EE2 / <i>Stryker Improvement</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2013	FY 2014	FY 2015
Begin the development test planning and execution for the ECP upgrade technologies, including tests for safety and human factors, automotive, communications, command and control (C3), Live Fire Testing and operational testing.												
Title: Contractor Support to Test Description: Funding is provided for the following effort FY 2015 Plans: Begin the contractor support of the test planning and execution. Support the Stryker platforms to include test preparation, vehicle maintenance/repair and overall test support for development tests, Live Fire Testing and operational testing.										-	-	1.659
Title: Government Engineering and Project Management Description: Funding is provided for the following effort FY 2015 Plans: Continuing Government Systems Engineering and Program Management which includes labor, travel, training, supplies and equipment										-	-	3.572
Accomplishments/Planned Programs Subtotals										-	-	90.206
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• Stryker Vehicle: <i>Stryker Vehicle (G85100)</i>	242.439	419.100	385.110	-	385.110	455.484	396.631	99.038	-	484.028	2,481.830	
• Stryker Modification: <i>Stryker Modification (GM0100)</i>	60.801	20.522	39.683	-	39.683	66.159	170.823	503.552	603.906	1,709.838	3,175.284	
• Spares (Initial) Stryker: <i>Spares (Initial) Stryker</i>	22.176	-	-	-	-	-	-	-	-	-	22.176	
Remarks												
The Phase III decision point associated with the Stryker ECP will determine the WTCV funds required, planned in FY2017												
D. Acquisition Strategy												
The Stryker ECP effort will buy back the vehicle space, weight, and power margin lost due to the addition of numerous kits in response to eleven years of war (20-combat rotations & 30+ million total miles), in order to allow integration of the future network (as directed by VCSA in August 2011) without further degrading the performance of the platform. In May 2012, Phase I (Design) of the Stryker ECP program was approved, permitting preliminary design and integration efforts on both												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>	Project (Number/Name) EE2 / <i>Stryker Improvement</i>
<p>the Flat Bottom (FB) and Double-V Hull (DVH) variants (completed). In March 2013, Phase II approved upgrading the mechanical power, electrical power generation, chassis upgrades and the in-vehicle network for the DVH vehicles. ECP Phase II contract awarded in November 2013, continues development engineering, prototype build test and evaluation. The Phase III (Production) decision point will determine the production requirements of the technologies selected in Phase II. Beginning in FY15, PE Number 0203735A/Project EE2 funds the Stryker ECP program, which was originally funded by PE Number 0603653A/Project C03 (FY13) and Project C51 (through FY14).</p> <p><u>E. Performance Metrics</u> N/A</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>						Project (Number/Name) EE2 / <i>Stryker Improvement</i>			
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management Office (PMO)	TBD	TACOM, MI : Various	0.000	-		-		3.572	Oct 2014	-		3.572	14.596	18.168	-
Subtotal			0.000	-		-		3.572		-		3.572	14.596	18.168	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Stryker ECP Development	SS/CPIF	GDLS, MI : Various	0.000	-		-		78.924	Oct 2014	-		78.924	68.765	147.689	-
Training Device Updates	TBD	PEO STRI, FL : Various	0.000	-		-		3.588	Mar 2015	-		3.588	7.181	10.769	-
Subtotal			0.000	-		-		82.512		-		82.512	75.946	158.458	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Support to Test	SS/CPFF	GDLS, MI : Various	0.000	-		-		1.659	Jan 2015	-		1.659	22.764	24.423	-
Stryker ECP Testing	TBD	Various Test Centers, Multiple : Various	0.000	-		-		2.463	Jan 2015	-		2.463	49.058	51.521	-
Subtotal			0.000	-		-		4.122		-		4.122	71.822	75.944	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		90.206		-		90.206	162.364	252.570	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army										Date: March 2014			
Appropriation/Budget Activity					R-1 Program Element (Number/Name)					Project (Number/Name)			
2040 / 7					PE 0203735A / Combat Vehicle Improvement Programs					EE2 / Stryker Improvement			

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Stryker Engineering Change Proposal (ECP)																												
ECP Critical Design Review																												
Production Decision																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0203735A / <i>Combat Vehicle Improvement Programs</i>	Project (Number/Name) EE2 / <i>Stryker Improvement</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Stryker Engineering Change Proposal (ECP)	1	2015	3	2019
ECP Critical Design Review	1	2015	1	2015
Production Decision	2	2017	2	2017